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REMARKS

The Office Action dated August 15, 2005 has been received and considered. In this response, claims 11, 28, 48 and 53 have been amended. Support for the amendments may be found in the specification and drawings as originally filed. Reconsideration of the outstanding rejections in the present application is respectfully requested based on the following remarks.

Allowability of Claims 1-3, 8-10, 16-18, 28, 31, 32, 34-38, 41-43, 45 and 46

The Applicants note with appreciation the indication at page 5 of the Office Action that claims 1-3, 8-10, 16-18, 28, 31, 32, 34-38, 41-43, 45 and 46 are allowed.

Objection to Claim Numbering

At page 2 of the Office Action, the numbering of the claims was objected to because claim 40 was missing from the listed sequence. In this response, the canceled status of claim 40 is indicated in the preceding claims listing. Withdrawal of this objection therefore is respectfully requested.

Rejections of Claims 11-13 and 48

At page 2 of the Office Action, claims 11-12 and 48 are rejected under 35 U.S.C. Section 102(b) as being anticipated by Rosch (U.S. Patent No. 6,243,820). At page 3 of the Office Action, claim 13 is rejected under 35 U.S.C. Section 103(a) as being unpatentable over Rosch in view of Bucher (U.S. Patent No. 6,678,737). These rejections are respectfully traversed.

Claim 11, from which claims 12 and 13 depend, has been amended to recite the features of identifying an operating characteristic of an instruction buffer, the operating characteristic comprising at least one of a buffer fullness or a rate of change of a number of pending instructions stored in the instruction buffer and adjusting a system characteristic based on the operating characteristic, wherein a power consumption of a system is modified based on the system characteristic and wherein adjusting the system characteristic includes modifying a clock speed. Claim 48 has been similarly amended. The Office Action asserts that Rosch teaches these claimed features. The Applicants respectfully disagree.

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Rosch teaches that the main object of the Rosch invention is “to reduce the power consumption of microprocessor-based devices through the application of a specific process and apparatus to perform said process *which reduces the frequency of the oscillator driving the processor automatically during periods in which it is performing non-critical operations.*”

Rosch, col. 3, lines 28-34 (emphasis added); *see also Id.*, Abstract. Further, Rosch teaches that

[p]eriods of non-critical use are determined by the lapse of a predetermined time period without the occurrence of a critical defined command (specific interrupts or other predetermined instructions) or the repetition of a pattern of non-critical instructions for a given number of iterations (for example, instructions for polling a keyboard, parity checking a spreadsheet, or polling sensor devices). The onset of critical use is determined by the occurrence of certain defined interrupts or instructions in the sequence ready by the microprocessor.

Id., col. 4, lines 5-14; *see also Id.*, col. 3, lines 50-58.

Thus, Rosch teaches that the periods in which a processor is performing non-critical operations and the frequency of its driving oscillator is accordingly reduced are determined based on a “lapse of a predetermined time period” or the “repetition of a pattern of non-critical instructions.” However, Rosch fails to disclose, or even suggest, that periods of non-critical operation are identified based in any manner on a buffer fullness of an instruction buffer or a rate of change of a number of pending instructions stored in an instruction buffer. Accordingly, Rosch fails to disclose or suggest the claimed features of identifying an operating characteristic of an instruction buffer, the operating characteristic comprising at least one of a buffer fullness or a rate of change of a number of pending instructions stored in the instruction buffer and adjusting a system characteristic based on the operating characteristic as recited by claims 1 and 48. The Office Action does not assert that these features are disclosed or suggested by Bucher, nor in fact does Bucher teach these features. Accordingly, Rosch and Bucher, individually or in combination, fail to disclose or suggest each and every feature recited by claims 11 and 48, as well as the additional features recited by claims 11 and 12 at least by virtue of their dependency from claim 11. Accordingly, reconsideration and withdrawal of the anticipation rejection of claims 11, 12 and 48 and the obviousness rejection of claim 13 is respectfully requested.

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Conclusion

The Applicants respectfully submit that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

The Commissioner is hereby authorized to charge any fees that may be required, or credit any overpayment, to Deposit Account Number 50-0441.

Respectfully submitted,

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Date


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